

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER No. R5-2009-XXXX

FOR

HOMESTAKE MINING COMPANY, EMMA G. TREBILCOTT TRUST, ROBERT AND JILL LEAL, NBC LEASING, INC., UNITED STATES BUREAU OF LAND MANAGEMENT, CHARLES MILLARD TRACY, JANET DEE TRACY, JAMES DALE WHITEAKER, SALLY C. WHITEAKER, CAL SIERRA PROPERTIES, GLEN MILLS, INC., TERRI KING BROWN, DAVID G. BROWN, LEAH C. TATE, ROY TATE, AND MERCED GENERAL CONSTRUCTION

THE WIDE AWAKE MERCURY MINE
COLUSA COUNTY

This Order is issued to Homestake Mining Company, Emma G. Trebilcott Trust, Robert and Jill Leal, NBC Leasing, Inc., the United States Bureau of Land Management, Charles Millard Tracy, Janet Dee Tracy, James Dale Whiteaker, Sally C. Whiteaker, Cal Sierra Properties, Glen Mills, Inc., Terri King Brown, David G. Brown, Leah C. Tate, Roy Tate, and Merced General Construction (hereafter collectively referred to as Dischargers) based on provisions of California Water Code (CWC) section 13304, which authorizes the Central Valley Regional Water Quality Control Board (Central Valley Water Board or Board) to issue a Cleanup and Abatement Order (Order), and CWC section 13267, which authorizes the Central Valley Water Board to require the submittal of technical and monitoring reports.

The Executive Officer of Central Valley Water Board finds, with respect to the Dischargers' acts or failure to act, the following:

1. The Wide Awake Mine (hereafter "Mine") is an inactive mercury mine with mining waste that includes in part, mine cuts, waste rock, and tailings that erode, or threatens to erode, into a Sulphur Creek tributary during storm runoff conditions. These wastes have eroded into drainage swales, ditches, and a tributary to Sulphur Creek, which is tributary to Cache Creek. The mine has discharged and continues to discharge mining waste into waters of the state, where it has created or threatens to create a condition of pollution or nuisance.
2. The Mine is located in the Sulphur Creek Mining District (District) of Colusa County, about one mile southwest of the Wilber Springs resort and about 26 miles southwest of Williams. The 100-acre property is described by Assessor's Parcel Numbers 018-200-010-000, 018-200-11-000, and 018-200-12-000 in Sections 28 and 29, Township 14 North, Range 5 West, Mount Diablo Base and Meridian (MDBM), as shown in Attachment A, a part of this Order.
3. Mining waste has been discharged at the Mine since mining activities began in the 1870s. Mining waste has been discharged onto ground surface where it has eroded into Sulphur Creek, resulting in elevated concentrations of metals within the creek. Mining waste discharged onto ground surface has not been evaluated for its potential impact to ground water. The Dischargers either own, have owned, or have operated the mining site where the Mine is located and where mining waste has been discharged. In its current condition, mining waste is causing or threatens to cause a discharge of pollutants to waters of the state.

4. The Central Valley Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition* (hereafter Basin Plan) states: "By 6 February 2009, the Regional Water Board shall adopt cleanup and abatement orders or take other appropriate actions to control discharges from the inactive mines (Table IV-6.4) in the Cache Creek watershed."
5. The parties listed in Attachment B, which is incorporated herein and made part of this Order, are known landowners, operators, or leaseholders of the Mine site as determined by Central Valley Water Board staff's review of property records from the Colusa County Recorders Office. All the parties named in this order either owned the site at the time when a discharge of mining waste into waters of the state took place, or operated the mine, thus facilitating the discharge of mining waste into waters of the state. The parties named in this Order as Dischargers are known to presently exist or have viable successor.
6. This Order may be revised to include additional Dischargers as they become known, and may include former owners and operators listed in Finding No 5.

Mining History

7. Mercury was discovered in the District in the 1870s, and the mine was developed at that time. The Mine was opened in the 1870s and may have been originally known as the Buckeye Mine, a name retained until the 1890s, at which time it was renamed the Wide Awake Mine. This information is described in the *CalFed-Cache Creek Study, Task 5C2: Final Report. Final Engineering Evaluation and Cost Analysis for the Sulphur Creek Mining District*, prepared by Tetra Tech EM Inc., September 2003 (hereafter CalFed Report).
8. Early production was from shallow workings and later, in the 1870s, a 500-foot vertical shaft was sunk with levels at 190, 290, and 390 feet below the ground surface. During shaft dewatering, water flowing to Blank Spring, a small local thermal spring 400 meters to the northwest of the Mine, was intersected. Efforts were made to drain the shaft by driving a drainage tunnel, but operations ceased shortly thereafter. Some ore from the nearby Empire mine was probably processed at the Mine during this period (CalFed Report).
9. The mine was worked extensively for several years in the 1870s with a reported output of approximately 1,800 flasks of mercury (one flask equals 76 pounds). Ore processing facilities in the 1870s included a Knox-Osborne 10-ton furnace and two small retorts. A small amount of production is reported during the 1890s and early 1900s (CalFed Report).
10. In the late 1890s and early 1900s, an effort was made to rehabilitate the vertical shaft and extensive surface facilities were constructed, including a 24-ton Scott furnace, enclosed hoist house, and bunkhouses (CalFed Report).
11. Some work was done in 1932 and 1943, and a moderate production was reported. The production in 1943 may have been in conjunction with mining and processing of ore from the nearby Manzanita mine to the north at a facility that was constructed on the Wide Awake property by the operators of the Manzanita mine (CalFed Report).

12. Total mercury production at the mine was probably not much greater than 1,800 flasks, most of which was produced in the 1870s (CalFed Report).
13. The Wide Awake Mine is intermediate in size and production relative to other mines in the Sulphur Creek Mining District. Remains of the Scott furnace and the rotary furnace with condenser coils remain largely intact on-site (CalFed Report).

Mining Waste Description and Characterization

14. Mining waste at the Mine includes mercury-bearing material from mine cuts, waste rock, tailings, waste around the perimeter of and within the processing facilities, and contaminated sediment within drainage swales, and ditches. Mining waste at the Mine erodes or threatens to erode into a Sulphur Creek tributary with stormwater runoff (CalFed Report).
15. The Mine contains about 20,000 cubic yards (CY) of processed tailings spread over an area of approximately 1.25 acres. An estimated 8,000 CY of waste rock is immediately adjacent to and within the tributary to Sulphur Creek. Another waste rock dump exposed in the eastern stream bank below the rotary furnace may contain up to 11,000 CY. An estimated 400 kilograms (kg) of mercury remains at the Mine, almost entirely within the mixed calcine (tailings) and waste piles (CalFed Report).
16. In 2002, waste extraction tests were conducted on mining waste. The results exceeded water quality objectives for the metals antimony, arsenic, chromium, mercury, and nickel. Maximum concentrations detected were: antimony - 107 micrograms per liter (ug/L), arsenic - 24.6 ug/L, chromium - 33.3 ug/L, mercury - 21 ug/L, and nickel - 102 ug/L. The potential for water-rock interaction to mobilize mercury from tailings is thought to be minimal based on analysis of waste extraction test (WET) leachates. However, water-rock interaction likely mobilizes mercury based on detection of mercury in a WET leachate sample from waste rock approximately 250 feet downstream from the 1940s furnace (CalFed Report). Complete characterization of the soil and mining waste at the site has not been performed.
17. The Mine waste rock and tailings are susceptible to erosion from uncontrolled stormwater runoff. Surface water runoff transports mercury-laden sediment into a tributary to Sulphur Creek, which is tributary to Cache Creek. Approximately 8 tons/year of sediment from the Mine is estimated to erode from mining waste located immediately adjacent to and within the tributary to Sulphur Creek. The estimated mercury lode from this Mine is 0.02 to 0.44 kg/yr or 2.4% of the total mine related mercury lode of 4.4 to 18.6 kg/yr to Sulphur Creek. It is estimated that the Mine contributes 1.53% of the mine related mercury lode from the District (CalFed Report).
18. Mercury concentrations detected in mining waste at the Mine range from 5.0 to 1,040 milligrams per kilogram (mg/kg). Site background concentrations range from 2.37 to 90 mg/kg (CalFed Report).
19. Aqueous mercury concentrations in Sulphur Creek are among the highest in the Cache Creek watershed, and remain elevated during non-peak flow periods. Active hydrothermal

springs constantly discharge into Sulphur Creek, with mercury concentrations ranging from 700 to 61,000 nanograms per liter (ng/L) (CalFed Report).

20. Dissolved mercury concentrations in Sulphur Creek are significantly higher than in the Cache Creek watershed in general, and dissolved mercury comprises as much as 90 percent of the total mercury in Sulphur Creek. Dissolved mercury appears to be released by the active hydrothermal system, whereas particulate-bound mercury in the upper Cache Creek basin comes from sediments and mercury-bearing mine waste mobilized into the creek during storms. Similar to total and dissolved concentrations, methyl mercury concentrations in Sulphur Creek are among the highest reported for the Cache Creek watershed. Methyl mercury concentrations were as high as 4 ng/L in Sulphur Creek above the confluence with Bear Creek (CalFed Report).
21. Mercury is a toxic substance, which can cause damage to the brain, kidneys, and to a developing fetus. Young children are particularly sensitive to mercury exposure. Methylmercury, the organic form of mercury that has entered the biological food chain, is of particular concern, as it accumulates in fish tissue and in wildlife and people that eat the fish. Mine waste present at this Mine may also pose a threat to human health due to exposure (dermal, ingestion, and inhalation) through recreational activities (hiking, camping, fishing, and hunting) or work at the site.

Regulatory Considerations

22. Section 303(d) of the Federal Clean Water Act requires states to identify waters not attaining water quality standards (referred to as the 303(d) list). Since 1990, Sulphur Creek has been identified by the Central Valley Water Board as an impaired water body because of high aqueous concentrations of mercury.
23. The Basin Plan designates beneficial uses of the waters of the state, establishes Water Quality Objectives (WQOs) to protect these uses, and establishes implementation policies to achieve WQOs.
24. Beneficial uses for Sulphur Creek, a tributary of Cache Creek, are: municipal and domestic supply; agricultural supply; industrial service supply; industrial process supply; water contact recreation and non-contact water recreation; warm freshwater habitat; cold fresh water habitat; spawning, reproduction, and/or early development; and wildlife habitat. In accordance with the Sources of Drinking Water Policy (State Water Resources Control Board Resolution No 88-63), the municipal and domestic supply designation (MUN) also applies to Sulphur Creek.
25. The beneficial uses of underlying groundwater, as stated in the Basin Plan, are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
26. The WQOs listed in the Basin Plan include numeric objectives, e.g., State drinking water Maximum Contaminant Levels (MCLs) that are incorporated by reference, and narrative objectives, including toxicity and taste and odor objectives for surface water and

groundwater. Chapter IV of the Basin Plan contains the *Policy for Application of Water Quality Objectives*, which provides that “[w]here compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Regional Board will, on a case-by-case basis, adopt numerical limitations in Orders which will implement the narrative objectives.” The numerical limits for the constituents of concern listed in the following table implement the Basin Plan objectives for mercury and methylmercury in Sulphur Creek.

Constituent	Limits	Type of WQO	Reference
Methyl Mercury (organic)	0.07 µg/L	Narrative Toxicity	USEPA IRIS Reference Dose (RfD) as a drinking water standard
Methyl Mercury (organic)	0.3 µg/L	Narrative Toxicity	USEPA National Ambient Water Quality Criteria (fish tissue)
Mercury (total)	0.050 µg/L	Narrative Toxicity	California Toxics Rule Human Health Protection
Mercury (inorganic)	1.2 µg/L	Narrative Toxicity	Public Health Goal

µg/L = micrograms/liter

27. The Cache Creek Watershed Mercury Program, included in the Basin Plan, requires responsible parties to develop plans to reduce existing loads of mercury from mining or other anthropogenic activities by 95% in the Cache Creek watershed (i.e., Cache Creek and its tributaries). The Basin Plan, Chapter IV, page 33.05 states that,

Responsible parties shall develop and submit for Executive Officer approval plans, including a time schedule, to reduce loads of mercury from mining or other anthropogenic activities by 95% of existing loads consistent with State Water Resources Control Board Resolution 92-49. The goal of the cleanup is to restore the mines to premining conditions with respect to the discharge of mercury. Mercury and methylmercury loads produced by interaction of thermal springs with mine wastes from the Turkey Run and Elgin mines are considered to be anthropogenic loading.

28. The Basin Plan, Chapter IV, page 33.05 states that,

The Sulphur Creek streambed and flood plain directly below the Central, Cherry Hill, Empire, Manzanita, West End and Wide Awake Mines contain mine waste. After mine cleanup has been initiated, the Dischargers shall develop and submit for Executive Officer approval a cleanup and abatement plan to reduce anthropogenic mercury loading in the creek.

29. The Dischargers shall be deemed in compliance with the above requirements if cleanup actions and maintenance activities are conducted in accordance with the approved plans.
30. Under CWC section 13050, subdivision (q)(1), “mining waste” means all solid, semisolid, and liquid waste materials from the extraction, beneficiation, and processing of ores and minerals. Mining waste includes, but is not limited to, soil, waste rock, and overburden, as defined in Public Resources Code section 2732, and tailings, slag, and other processed waste materials....” The constituents listed in Findings No.14 and 15 are mining wastes as defined in CWC section 13050, subdivision (q)(1).

31. Because the site contains mining waste as described in CWC sections 13050, closure of Mining Unit(s) must comply with the requirements of California Code of Regulations, title 27, sections 22470 through 22510 and with such provisions of the other portions of California Code of Regulations, title 27 that are specifically referenced in that article.
32. Affecting the beneficial uses of waters of the state by exceeding applicable WQOs constitutes a condition of pollution as defined in CWC section 13050, subdivision (1). The Dischargers have caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has created, and continues to threaten to create, a condition of pollution or nuisance.
33. CWC section 13304(a) states that:
- Any person who has discharged or discharges waste into the waters of this state in violation of any waste discharge requirement or other order or prohibition issued by a Regional Water Board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the Regional Water Board, clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including, but not limited to, overseeing cleanup and abatement efforts. A cleanup and abatement order issued by the state board or a Regional Water Board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner. Upon failure of any person to comply with the cleanup or abatement order, the Attorney General, at the request of the board, shall petition the superior court for that county for the issuance of an injunction requiring the person to comply with the order. In the suit, the court shall have jurisdiction to grant a prohibitory or mandatory injunction, either preliminary or permanent, as the facts may warrant.
34. The State Water Resources Control Board (State Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under CWC Section 13304*. This Resolution sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Board Resolution No. 68-16, the *Statement of Policy With Respect to Maintaining High Quality of Waters in California*. Resolution No. 92-49 and the Basin Plan establish cleanup levels to be achieved. Resolution No. 92-49 requires waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with California Code of Regulations, title 23, section 2550.4. Any alternative cleanup level to background must: (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Board.
35. Chapter IV of the Basin Plan contains the *Policy for Investigation and Cleanup of Contaminated Sites*, which describes the Central Valley Water Board's policy for managing contaminated sites. This policy is based on CWC sections 13000 and 13304, California Code of Regulations, title 23, division 3, chapter 15; California Code of Regulations, title 23,

division 2, subdivision 1; and State Water Board Resolution Nos. 68-16 and 92-49. The policy addresses site investigation, source removal or containment, information required to be submitted for consideration in establishing cleanup levels, and the basis for establishment of soil and groundwater cleanup levels.

36. The State Board's *Water Quality Enforcement Policy* states in part:

At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the Central Valley Water Board allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the Order should require the discharger(s) to abate the effects of the discharge (Water Quality Enforcement Policy, p. 19).

37. CWC section 13267(b)(1) states that:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

38. The technical reports required by this Order are necessary to ensure compliance with this Cleanup and Abatement Order, and to ensure the protection of the waters of the state. The Dischargers either own, have owned, operated, or have operated the mining site subject to this Order.

39. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act (CEQA) (Pub. Resources Code, section 21000 et seq.), pursuant to California Code of Regulations, title 14, section 15321(a)(2). The implementation of this Order is also an action to assure the restoration of natural resources and/or the environment and is exempt from the provisions of the CEQA, in accordance with California Code of Regulations, title 14 sections 15307 and 15308. This Order may also be classified as a minor action to prevent, minimize, stabilize, mitigate or eliminate the release or threat of release of hazardous waste or substances, and is exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14 section 15330.

IT IS HEREBY ORDERED that, the Dischargers, and their agents, assigns and successors, in order to meet the provisions contained in Division 7 of the California Water Code and regulations, plans and policies adopted thereunder, shall cleanup and abate, forthwith, the effects of the discharges.

“Forthwith” means as soon as is reasonably possible. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below.

The Dischargers shall:

1. Conduct all work in conformance with State Board Resolution No. 92-49 Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304 and with the Regional Board’s Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV).

Waste Characterization

2. By **1 April 2009**, submit a *Mining Waste Characterization Work Plan* (hereafter *Characterization Plan*) for the Mine site. The Characterization Plan shall assess the nature and extent of mining waste discharged at the site and the potential threat to water quality and/or human health. The Characterization Plan shall describe the methods that will be used to establish background levels for soil, surface water, and ground water at the site, and the means and methods for determining the vertical and lateral extent of the mining waste.

The Characterization Plan shall also address slope stability of the site and assess the need for slope design and slope stability measures to minimize the transport of mining waste-laden soils to surface water and ephemeral streams. The Characterization Plan shall adopt the time schedule as described below in items 3 through 13 below for implementation of the proposed work.

3. Within **30 days** of staff concurrence with the Characterization Plan, but no later than **4 May 2009**, begin implementing the Characterization Plan in accordance with the approved time schedule, which shall become part of this Order.
4. By **28 August 2009**, submit a *Mining Waste Characterization Report* (hereafter *Characterization Report*) for the Mine. The Characterization Report shall include:
 - a. A narrative summary of the field investigation;
 - b. A section describing background soil concentrations, mining waste concentrations, and the vertical and lateral extent of the mining waste;
 - c. Surface water and ground water sampling results;
 - d. A section describing slope stability and erosion potential and recommendations for slope stabilization;
 - e. An evaluation of risks to human health from site conditions, and;

- f. A work plan for additional investigation, if needed, as determined by staff. If no additional investigation is needed, this report shall be the Final Characterization Report.
5. By **28 August 2009**, submit a *Surface and Ground Water Monitoring Plan* (hereafter *Monitoring Plan*) for the Mine. The Monitoring Plan shall describe the methods and rationale that will be used to establish background levels for surface water and ground water at the site. The Monitoring Plan shall also address long-term monitoring necessary to confirm the effectiveness of the remedies.

Water Supply Well Survey

6. By **1 May 2009**, submit the results of a water supply well survey within one-half mile of the site and a sampling plan to sample any water supply well(s) threatened to be polluted by mining waste originating from the site. The sampling plan shall include specific actions and a commitment by the Dischargers to implement the sampling plans, including obtaining any necessary access agreements. If the Dischargers demonstrate that exceedances of water quality objectives in the water supply well survey discussed above are the result of naturally occurring hydrothermal sources, then the Dischargers may request a waiver of requirements No. 7 and 8 listed below.
7. Within **30 days** of staff concurrence with the water supply well sampling plan, the Dischargers shall implement the sampling plan and submit the sampling results in accordance with the approved time schedule, which shall become part of this Order.
8. Within **30 days** of staff notifying the Dischargers that an alternate water supply is necessary, submit a work plan and schedule to provide an in-kind replacement for any impacted water supply well. The Dischargers shall implement the work plan in accordance with an approved time schedule, which shall become part of this Order.

Site Remediation

9. Within **90 days** of staff concurrence with the Characterization Report, submit a Site Remediation Work Plan (hereafter Remediation Plan) for the site. The Remediation Plan shall describe remediation activities to clean up or remediate the mining waste to background concentrations, or to the lowest level that is technically and economically achievable to reduce the movement of mining waste to ground water and Sulphur Creek. The Remediation Plan shall also address long-term maintenance and monitoring necessary to confirm and preserve the long-term effectiveness of the remedies. The potential remediation activities shall comply with all applicable WQOs and mercury TMDLs of the Basin Plan and promulgated water quality criteria for Sulphur Creek. The Remediation Plan shall also include:
 - a. An evaluation of water quality risk assessment:
 - b. A human health risk assessment:
 - c. A time schedule to conduct the remediation activities.

10. Within **60 days** of staff concurrence with the Remediation Plan, submit a Site Implementation Plan (hereafter Implementation Plan), which describes the preferred remediation activity for site remediation. The Implementation Plan and the approved time schedule shall become a part of this Order.
11. Within **30 days** of staff concurrence of the Implementation Plan for site cleanup of the mining waste, the Dischargers shall commence remedial activities of the mining waste. The Dischargers shall notify staff a minimum of 72 hours prior to beginning fieldwork.
12. By **31 December 2011**, clean up and abate the effects, including threats to human health and waters of the state, of mining waste discharged from past mining activities at the Wide Awake Mine.
13. Within **60 days** of completion of the remedial activities described in the Implementation Plan, the Dischargers shall submit a Completion Report describing the remediation and results of the cleanup work. The Completion Report shall clearly describe the installation of any containment structures, covers and/or stabilization efforts, and any required post closure maintenance of the Mining Unit(s) described in Finding No. 31 above.
14. By **30 April 2012**, the Dischargers shall develop and submit for Executive Officer approval a cleanup and abatement plan to reduce anthropogenic mercury loading in the creek at and downstream of the mine site as described in Finding No. 27 above.

General Requirements

The Dischargers shall:

15. Reimburse the Central Valley Water Board for reasonable costs associated with oversight of the investigation and remediation of the site. Within **30 days** of the effective date of this Order, the Dischargers shall provide the name and address where the invoices shall be sent. Failure to provide a name and address for invoices and/or failure to reimburse the Central Valley Water Board's oversight costs in a timely manner shall be considered a violation of this Order. If the Central Valley Water Board adopts Waste Discharge Requirements (WDRs), review of reports related to writing of the WDRs and all compliance measures thereafter would be subject to the fees required by issuance of the Order and the reimbursement under this requirement would no longer apply.
16. Submit all reports with a cover letter signed by the Dischargers. In the cover letter, the Dischargers shall express their concurrence or non-concurrence with the contents of all reports and work plans.
17. Notify staff at least three working days prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation and is not routine monitoring, maintenance, or inspection.
18. Obtain all local and state permits and access agreements necessary to fulfill the requirements of this Order prior to beginning work.

19. Continue any remediation or monitoring activities until such time as the Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order and this Order has been rescinded.

Any person signing a document submitted under this Order must make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my knowledge and on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments must be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain work plans for, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology must be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Dischargers must contain the professional's signature and, where necessary, his stamp or seal.

The Executive Officer may extend the deadlines contained in this Order if the Dischargers demonstrate that unforeseeable contingencies have created delays, provided that the Dischargers continue to undertake all appropriate measures to meet the deadlines and make the extension request in advance of the expiration of the deadline. The Dischargers shall make any deadline extension request in writing prior to the compliance date. An extension may be denied in writing or granted by revision of this Order or by a letter from the Executive Officer. Any request for an extension not responded to in writing by the Board shall be deemed denied.

If, in the opinion of the Executive Officer, the Dischargers fail to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability. Failure to comply with this Order may result in the assessment of an Administrative Civil Liability of up to \$10,000 per violation per day pursuant to the California Water Code sections 13268, 13350 and/or 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

This Order is effective upon the date of signature.

PAMELA C. CREEDON, Executive Officer

(Date)